#### **ATTACHMENT 1**

#### **APPENDIX A**

### STATEMENT OF WORK

## "CONSTRUCTION PROJECT MANAGEMENT SERVICES AND SUPPORT"

# August 20, 2008

### **BACKGROUND**

The National Renewable Energy Laboratory (NREL) is experiencing unprecedented growth in both personnel and new facilities construction projects. NREL is in need of project management support services to bolster the Major Construction Planning and Acquisition Office's project management capability. To assist NREL toward this goal, the Subcontractor shall provide personnel to assist with and support project management activities in accordance with NREL and Department of Energy (DOE) procedures and guidelines.

#### **OBJECTIVE**

The objective of this effort is to obtain Subcontractor services and support to assist NREL staff to complete construction projects within the Major Construction Planning and Acquisition Office. Staffing levels are described in the Requirements section of this Statement of Work. General duties for all levels are described below:

### **Duties**

- Coordination, participation/development of, and review of project documents related to meeting the documentation requirements of DOE Order 413.3a including:
  - Project tailoring strategy
  - Project programming documents
  - Conceptual Design Report
  - Project Acquisition Strategy
  - o Project Execution Plan
  - Environmental Documents
  - Security Vulnerability Assessment Report
  - Hazard Analysis Report
  - Safety Validation Report
  - Quality Assurance Report
  - o Performance Baseline
  - o Cyber Security Plan
  - Construction Safety and Health Plan
  - o Project Completion Criteria
  - Project Transition to Operations Plan
  - o Commissioning Plan
  - Lessons Learned Documents
  - Operational Documentation

- Support NREL Project Managers in project controls tasks including:
  - Developing and maintaining a project performance baseline
  - o Developing and maintaining project work breakdown structures
  - Developing and maintaining resource loaded schedules
  - o Developing and maintaining organizational breakdown schedules
  - Monitoring, tracking, analyzing, and reporting schedule progress and cost performance
  - Supporting change and deviation control
  - Developing and reporting earned value data for multiple multi-discipline Line Item construction projects
  - Performing engineering economic analysis
  - Performing variance analysis
- Assist NREL Project Managers in coordinating project related meetings including:
  - o Independent Project Reviews
  - Design Advisory Board Reviews
  - Status meetings
  - Design and construction meetings
  - Design Charrettes
  - Industry Charrettes
- Assist Project Managers in the following:
  - Performing design reviews
  - Construction management services
  - Commissioning services
  - o Substantiation of contractual requirements
  - Owner's representative functions
- Support NREL Project Managers in developing documents for long lead procurement actions.

#### **LOCATION**

All work shall be performed on-site at NREL's Permanent Sites or leased facilities. NREL will provide office space, supplies, computer equipment, telephones, and any other necessary materials required by Subcontractor's personnel to perform required services. In some instances, with NREL's approval, it may be acceptable for the Subcontractor's personnel to work from a remote site; however in those instances, supplies, computer equipment, and telephones shall be supplied by the Subcontractor.

## DRUG TESTS, REFERENCE CHECKS AND BACKGROUND CHECKS

The Subcontractor shall be required to conduct a drug test, reference check, and background check on each of Subcontractor's personnel that have been selected for assignment under this subcontract. The drug test, reference check, and background check must be completed prior to the physical assignment of each individual Subcontractor's personnel to the NREL site.

In addition to conducting the drug test, reference check, and background check, the Subcontractor shall perform a thorough review of the drug test, reference check, and background investigative report. The Subcontractor shall promptly notify NREL of any findings that could adversely affect the Subcontractor's personnel's assignment to the subcontract work.

On an as-needed basis, NREL may request a review of the drug test, reference check, and background investigative report of an individual Subcontractor's personnel identified to be

assigned to work under this subcontract. Prior to releasing the drug test, reference check, and background investigative report to NREL, the Subcontractor shall obtain a signed release and consent from the individual Subcontractor's personnel.

### **SAFETY AND SECURITY**

The Subcontractor shall be responsible for ensuring that each of the Subcontractor's personnel assigned to work on this subcontract:

- Satisfy all NREL access security requirements; and
- Complete an NREL Security Orientation and Safety Course.

## NONDISCLOSURE AGREEMENT

The Subcontractor shall be responsible for ensuring that each of the Subcontractor's personnel assigned to work on this subcontract complete and sign an NREL nondisclosure agreement prior to commencement of work.

## **REQUIREMENTS**

The Subcontractor shall provide personnel at three levels of capability and experience.

Level 1 - Requires a bachelor's degree in engineering, project management, construction management or other relevant field (equivalent) and up to 5 years of directly applicable experience. Level 1 must have knowledge of DOE Order 413.3a. Sound communication, organizational, and interpersonal skills are required. Must have the ability to perform well with short deadlines.

Level 2 - Requires a bachelor's degree in engineering, project management, construction management or other relevant field (equivalent) and 5 to 15 years of directly applicable experience. Level 2 must have in-depth knowledge and experience with DOE Order 413.3a. This level should require little guidance in executing assignments. Sound communication, organizational, and interpersonal skills are required. Must have the ability to perform well with short deadlines.

Level 3 - Requires a bachelor's degree in engineering, project management, construction management or other relevant field (equivalent) and beyond 15 years of directly applicable experience. Level 3 must have in-depth knowledge and experience with DOE Order 413.3a. This level should provide consultation and require extremely little guidance in executing assignments. Sound communication, organizational, and interpersonal skills are required. Must have the ability to perform well with short deadlines.